

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCR-000640**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 18-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0612**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Lift 12 Longitudinal Diaphragm
Procedural	Procedural	Description:	

Reference Description: Perform of CWR repair on Lift 12 Longitudinal Diaphragm without following the approved procedure

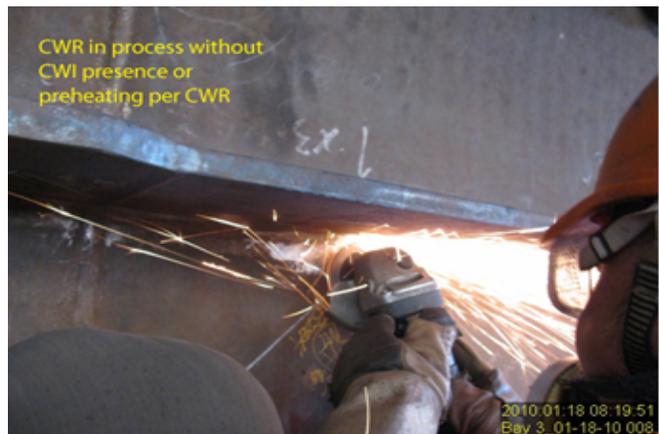
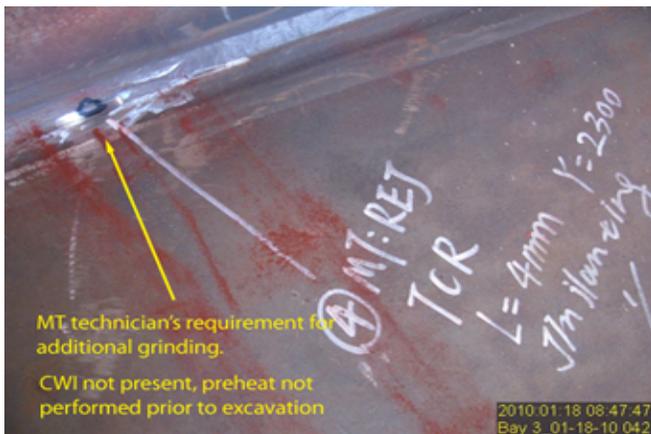
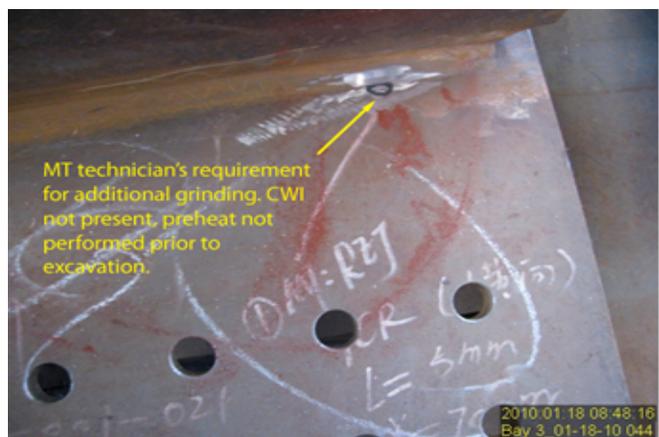
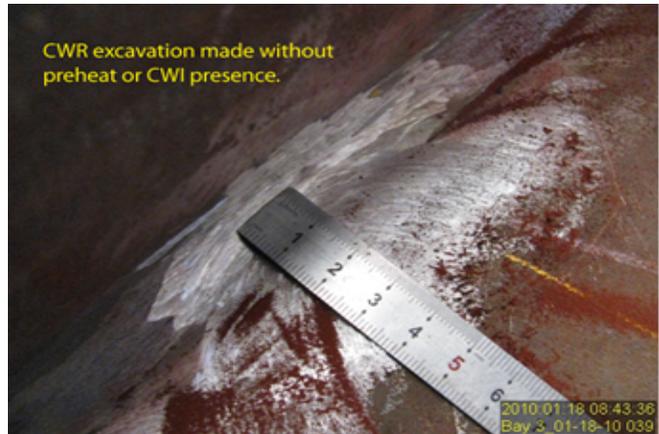
Description of Non-Conformance:

During random in process observations of the fabrication of the longitudinal diaphragms in subassembly, this Quality Assurance (QA) Inspector observed the following issues:

- ZPMC personnel were excavating Magnetic Particle (MT) Indications identified by ZPMC's MT Technician as cracks. The ZPMC worker did not have the approved Critical Weld Repair (CWR) B-1050 and B-1051 on hand during the repair.
- ZPMC Quality Control (QC) Certified Weld Inspector (CWI) was not present.
- ZPMC personnel were performing crack removal by grinding without preheat per these approved CWRs.
- Members are identified as LD3008-001 and LD3010-001.
- CWRs identified as B-CWR1051 for LD3008-001 and B-CWR1050 for LD3010-001 specify that QC CWI shall be present with the approved CWR in hand and preheat to 650 C prior to excavation by grinding.
- The following areas were being excavated:
 - LD3008-001; Weld 21; Y=75mm, Weld 14; Y=2300mm, Weld 08; Y=1100mm, Weld 07; Y=400mm, and Weld 06; Y=500mm.
 - LD3010-001; Weld 49; Y=300mm, and Weld 43; Y=0mm.
- These welds are all fillet weld T-joints joining longitudinal diaphragm stiffeners to longitudinal diaphragm web plates.
- The longitudinal diaphragms are located in the Sub-Assembly Bay 3.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

Critical Weld Repair(s) B-CWR1050 and B-CWR1051; (1) “QC and a Lead CWI shall be present, direct and supervise all grinding and welding operations during this repair...” (2) “QC and Lead CWI shall have an approved copy of the CWR in hand prior to the repair.” (4) “...Preheat to a minimum 65degrees C before

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

removing cracks by grinding,..."

Who discovered the problem: Stefan Holmes

Name of individual from Contractor notified: Feng Yun Long

Time and method of notification: 0830 hours, 01/18/10, Verbal

Name of Caltrans Engineer notified: Bill Howe, Ching Chao

Time and method of notification: 0800 hours, 01/19/10, Email

QC Inspector's Name: Guo Yuan Ting

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

Comments:

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

Inspected By:	Tsang, Eric	SMR
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Reviewed By:	Wahbeh, Mazen	SMR
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DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
 333 Burma Road
 Oakland CA 94607
 Tel: Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV
 375 BURMA ROAD
 OAKLAND CA 95607

Date: 21-Jan-2010

Contract No: 04-0120F4
 04-SF-80-13.2 / 13.9

Dear: Mr. Charles Kanapicki
Job Name: SAS Superstructure

Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Document No: 05.03.06-000603

Subject: NCR No. ZPMC-0612

Reference Description: Perform of CWR repair on Lift 12 Longitudinal Diaphragm without following the approved procedure

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

Material Location: OBG **Lift:** 12

Remarks:

- During random in process observations of the fabrication of the longitudinal diaphragms in subassembly, this Quality Assurance (QA) Inspector observed the following issues:
- ZPMC personnel were excavating Magnetic Particle (MT) Indications identified by ZPMC’s MT Technician as cracks. The ZPMC worker did not have the approved Critical Weld Repair (CWR) B-1050 and B-1051 on hand during the repair.
 - ZPMC Quality Control (QC) Certified Weld Inspector (CWI) was not present.
 - ZPMC personnel were performing crack removal by grinding without preheat per these approved CWRs.
 - Members are identified as LD3008-001 and LD3010-001.
 - CWRs identified as B-CWR1051 for LD3008-001 and B-CWR1050 for LD3010-001 specify that QC CWI shall be present with the approved CWR in hand and preheat to 650 C prior to excavation by grinding.
 - The following areas were being excavated:
 - LD3008-001; Weld 21; Y=75mm, Weld 14; Y=2300mm, Weld 08; Y=1100mm, Weld 07; Y=400mm, and Weld 06; Y=500mm.
 - LD3010-001; Weld 49; Y=300mm, and Weld 43; Y=0mm.
 - These welds are all fillet weld T-joints joining longitudinal diaphragm stiffeners to longitudinal diaphragm web plates.
 - The longitudinal diaphragms are located in the Sub-Assembly Bay 3.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Bill Howe Sr. Transportation Engineer

Attachments: ZPMC-0612

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao

NCT

(Continued Page 2 of 2)

File: 05.03.06

NCR PROPOSED RESOLUTION

To: CALTRANS - SAS Superstructure
333 Burma Road
Oakland CA 94607

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000603

Subject: NCR No. ZPMC-0612

Dated: 21-May-2010

Contract No.: 04-0120F4
04-SF-80-13.2 / 13.9

Job Name: SAS Superstructure

Document No.: ABF-NPR-000672 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: Excavation by ZPMC is allowed without a CWR/WRR in order to determine the extent of the underlying indication and to determine if the indication has been fully removed before weld repair begins.

The incident documented by the inspector for this NCR is excavation. Excavation by ZPMC is allowed without a CWR/WRR in order to determine the extent of the underlying indication and to determine if the indication has been fully removed before weld repair begins. In this case, only the excavation was performed. As previously agreed to by the Department this activity alone does not constitute a non conformance. Based on this, ZPMC requests that this NCR be closed.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000672R00;

Caltrans' comments:

Status: REJ

Date: 25-May-2010

This NCR was not issued due to ZPMC performing excavation. The NCR was issued because ZPMC did not perform the excavation in accordance with the approved CWR. Preheating, as required by the CWR, was not performed prior to excavation and no CWI was present during the repairs. Please revise this NPR to address these items.

Submitted by: Eagen, Sean

Attachment(s):

Date: 25-May-2010



No. B-769

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-5-21

REGARDING: NCR-000568(ZPMC-0541) NCR-000640(ZPMC-0612)

As an agreement among parties, ZPMC is allowed to excavate the indications found by MT or UT without the approval of WRRs or CWRs. Based on this, ZPMC is requesting withdrawals of these misunderstood NCRs.

ATTACHMENT:

NCR-000568(ZPMC-0541)

NCR-000640(ZPMC-0612)

A handwritten signature in black ink, appearing to be 'J. J. ...' with a stylized flourish at the end.

5/21/10



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
333 Burma Road
Oakland CA 94607
Tel: Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV
375 BURMA ROAD
OAKLAND CA 95607

Date: 29-Dec-2009

Contract No: 04-0120F4
04-SF-80-13.2 / 13.9

Dear: Mr. Charles Kanapicki

Job Name: SAS Superstructure

Attention: Mr. Thomas Nilsson Project/Fabrication Manager

Document No: 05.03.06-000531

Subject: NCR No. ZPMC-0541

Reference Description: ZPMC performed third time weld repair excavations to a SPCM weld without the Engineer's approval or an Critical Weld Report
The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

Material Location: OBG

Lift: 07

Remarks:

This QA observed ZPMC welding personnel performing third (3rd) time weld repair excavations to Seismic Performance Critical Material (SPCM) weld without the Engineer's approval or an Critical Weld Report (CWR) in the following four (4) locations:

- "Y" = 5260mm and 8460mm on the outside surface pulling from the west end of the segment.
- "Y" = 2130mm and 3680mm on the inside surface pulling from Panel Point 059.
- The Orthotropic Box Girder (OBG) segment is identified as 7EW.
- The weld is identified as SEG041A-001.
- The weld is designated as SPCM on the approved drawings.
- The weld is a Complete Joint Penetration (CJP) butt joint joining Side Panel identified as SP433A (SPCM) to SP101A.

Action Required and/or Action Taken:

Do not perform 3 time SPCM repair without notification and approval of a CWR. Submit UT test data to verify weld soundness.

Transmitted by: Bill Howe

Attachments: ZPMC-0541

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao
File: 05.03.06

**DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES**Office of Structural Materials
Quality Assurance and Source InspectionBay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT**

Location: Changxing Island, Shanghai, P.R. China

Report No: NCR-000568

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 28-Dec-2009

Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

NCR #: ZPMC-0541

Type of problem:Welding Concrete Other Welding Curing Procedural Joint fit-up Coating Other Procedural Procedural Description:

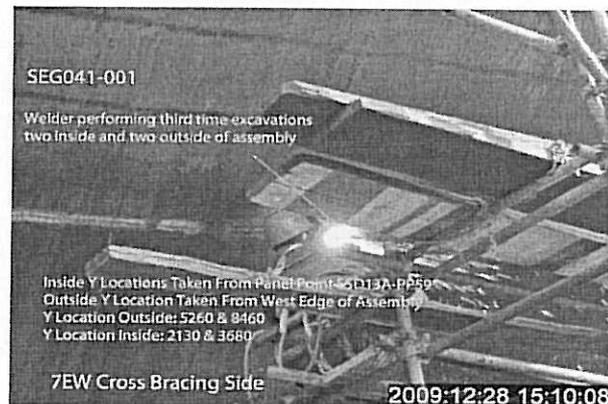
Bridge No: 34-0006

Component: OBG Segment 7EW Side Plate

Reference Description: ZPMC performed third time weld repair excavations to a SPCM weld without the Engineer's approval or an Critical Weld Report**Description of Non-Conformance:**

This QA observed ZPMC welding personnel performing third (3rd) time weld repair excavations to Seismic Performance Critical Material (SPCM) weld without the Engineer's approval or an Critical Weld Report (CWR) in the following four (4) locations:

- "Y" = 5260mm and 8460mm on the outside surface pulling from the west end of the segment.
- "Y" = 2130mm and 3680mm on the inside surface pulling from Panel Point 059.
- The Orthotropic Box Girder (OBG) segment is identified as 7EW.
- The weld is identified as SEG041A-001.
- The weld is designated as SPCM on the approved drawings.
- The weld is a Complete Joint Penetration (CJP) butt joint joining Side Panel identified as SP433A (SPCM) to SP101A.

**Applicable reference:**

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Caltrans Special Provisions section 8-3.01 specifies In addition to the provisions in AWS D1.5, section 3.7.4 and section 12.17, third time repairs of welds, or base metal, regardless of NDT method,...require prior approval of the Engineer.”

Who discovered the problem: Tim Murphy

Name of individual from Contractor notified: Wang Li Yang

Time and method of notification: 1600 hours, 12-28-09, Verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 0930 hours, 12-29-09, Verbal

QC Inspector's Name: Wang Lu

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

Comments:

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

Inspected By: Carreon,Albert

Lead Reviewer/Task Leader

Reviewed By: Wahbeh,Mazen

SMR



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
 333 Burma Road
 Oakland CA 94607
 Tel: Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV
 375 BURMA ROAD
 OAKLAND CA 95607

Date: 21-Jan-2010

Contract No: 04-0120F4
 04-SF-80-13.2 / 13.9

Dear: Mr. Charles Kanapicki
Job Name: SAS Superstructure

Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Document No: 05.03.06-000603

Subject: NCR No. ZPMC-0612

Reference Description: Perform of CWR repair on Lift 12 Longitudinal Diaphragm without following the approved procedure.

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

Material Location: OBG **Lift:** 12

Remarks:

During random in process observations of the fabrication of the longitudinal diaphragms in subassembly, this Quality Assurance (QA) Inspector observed the following issues:

- ZPMC personnel were excavating Magnetic Particle (MT) Indications identified by ZPMC's MT Technician as cracks. The ZPMC worker did not have the approved Critical Weld Repair (CWR) B-1050 and B-1051 on hand during the repair.
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- ZPMC personnel were performing crack removal by grinding without preheat per these approved CWRs.
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- LD3010-001; Weld 49; Y=300mm, and Weld 43; Y=0mm.
- These welds are all fillet weld T-joints joining longitudinal diaphragm stiffeners to longitudinal diaphragm web plates.
- The longitudinal diaphragms are located in the Sub-Assembly Bay 3.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Bill Howe Sr. Transportation Engineer

Attachments: ZPMC-0612

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao

02.02.15.04
 05.03.06-000603,NCT

Received
 NCT-000603 22 Jan 10 Page 1 of 2

NCT

(Continued Page 2 of 2)

File: 05.03.06

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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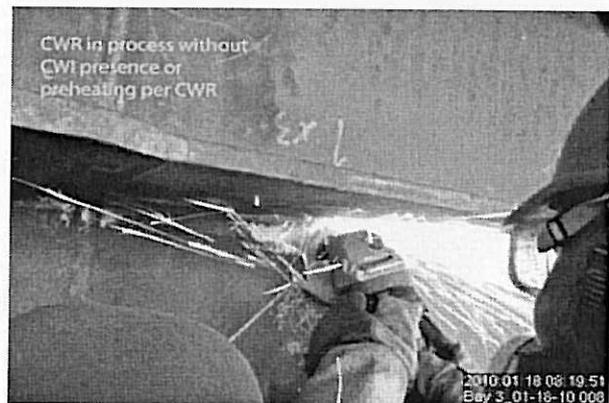
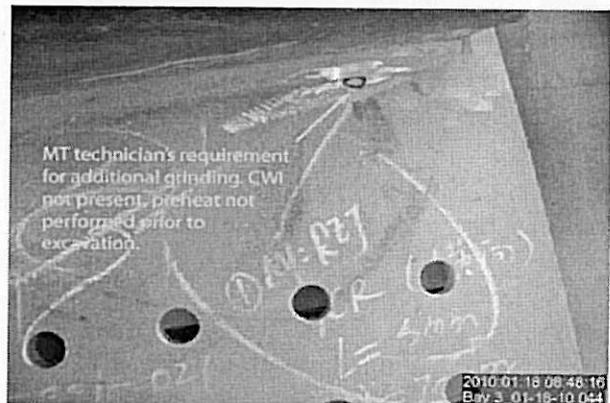
Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCR-000640**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 18-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0612**Type of problem:****Welding** **Concrete** **Other** **Welding** **Curing** **Procedural** **Bridge No:** 34-0006**Joint fit-up** **Coating** **Other** **Component:** Lift 12 Longitudinal Diaphragm**Procedural** **Procedural** **Description:****Reference Description:** Perform of CWR repair on Lift 12 Longitudinal Diaphragm without following the approved procedure**Description of Non-Conformance:**

During random in process observations of the fabrication of the longitudinal diaphragms in subassembly, this Quality Assurance (QA) Inspector observed the following issues:

- ZPMC personnel were excavating Magnetic Particle (MT) Indications identified by ZPMC's MT Technician as cracks. The ZPMC worker did not have the approved Critical Weld Repair (CWR) B-1050 and B-1051 on hand during the repair.
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- ZPMC personnel were performing crack removal by grinding without preheat per these approved CWRs.
- Members are identified as LD3008-001 and LD3010-001.
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

Critical Weld Repair(s) B-CWR1050 and B-CWR1051; (1) “QC and a Lead CWI shall be present, direct and supervise all grinding and welding operations during this repair...” (2) “QC and Lead CWI shall have an approved copy of the CWR in hand prior to the repair.” (4) “...Preheat to a minimum 65degrees C before

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

removing cracks by grinding,...”

Who discovered the problem: Stefan Holmes

Name of individual from Contractor notified: Feng Yun Long

Time and method of notification: 0830 hours, 01/18/10, Verbal

Name of Caltrans Engineer notified: Bill Howe, Ching Chao

Time and method of notification: 0800 hours, 01/19/10, Email

QC Inspector's Name: Guo Yuan Ting

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

Comments:

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Inspected By: Tsang, Eric SMR

Reviewed By: Wahbeh, Mazen SMR

NCR PROPOSED RESOLUTION

To: CALTRANS - SAS Superstructure
333 Burma Road
Oakland CA 94607

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000603

Subject: NCR No. ZPMC-0612

Dated: 10-Jun-2010

Contract No.: 04-0120F4
04-SF-80-13.2 / 13.9

Job Name: SAS Superstructure

Document No.: ABF-NPR-000672 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: ZPMC is providing NDT of the welds after repair and is requesting closure based on the acceptable results.
ZPMC is providing NDT of the welds after repair and is requesting closure based on the acceptable results.

Submitted by: Ishibashi, Joshua
Attachment(s): ABF-NPR-000672R01;

Caltrans' comments:

Status: REJ

Date: 14-Jun-2010

Please provide a description of what actions will be taken to prevent this non-conformance from occurring in the future.

Submitted by: Eagen, Sean
Attachment(s):

Date: 14-Jun-2010



No. B-784

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-6-10

REGARDING: NCR-000640(ZPMC-0612)

ZPMC is providing the NDT records to show the acceptance of these repairs and is requesting closure of this NCR.

ATTACHMENT:

NCR-000640(ZPMC-0612)

B787-MT-17519 R1

B787-MT-17559 R1-2

Long

6/10/10



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
333 Burma Road
Oakland CA 94607
Tel: Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV
375 BURMA ROAD
OAKLAND CA 95607
Date: 21-Jan-2010
Contract No: 04-0120F4
04-SF-80-13.2 / 13.9
Dear: Mr. Charles Kanapicki
Job Name: SAS Superstructure
Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Document No: 05.03.06-000603
Subject: NCR No. ZPMC-0612

Reference Description: Perform of CWR repair on Lift 12 Longitudinal Diaphragm without following the approved procedure

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- Non-Conformance Resolved.

Material Location: OBG

Lift: 12

Remarks:

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Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Bill Howe Sr. Transportation Engineer
Attachments: ZPMC-0612

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao

02.02:15.04
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Received
NCT-000603 22 Jan 10 Page 1 of 2

NCT

(Continued Page 2 of 2)

File: 05.03.06

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.25B

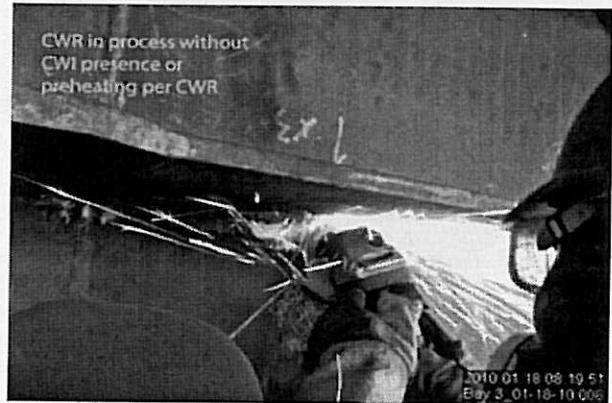
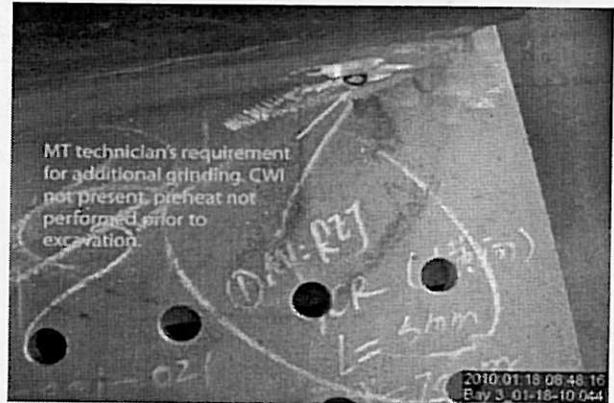
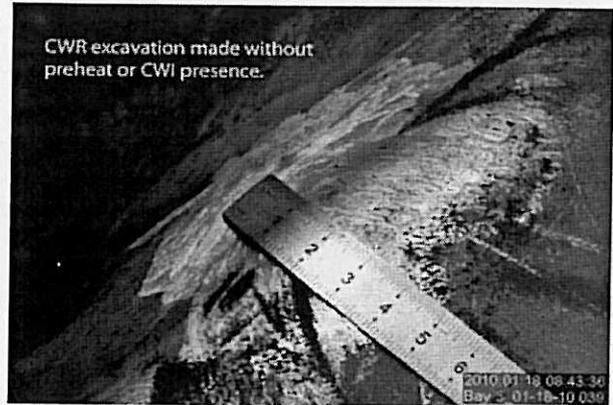
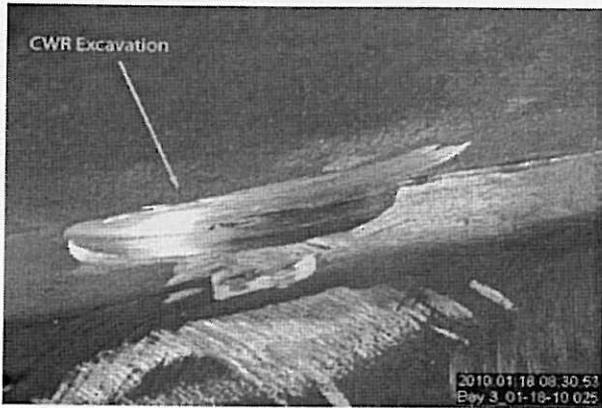
QUALITY ASSURANCE -- NON-CONFORMANCE REPORT**Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCR-000640**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 18-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0612**Type of problem:**Welding Concrete Other Welding Curing Procedural **Bridge No:** 34-0006Joint fit-up Coating Other **Component:** Lift 12 Longitudinal DiaphragmProcedural Procedural Description:**Reference Description:** Perform of CWR repair on Lift 12 Longitudinal Diaphragm without following the approved procedure**Description of Non-Conformance:**

During random in process observations of the fabrication of the longitudinal diaphragms in subassembly, this Quality Assurance (QA) Inspector observed the following issues:

- ZPMC personnel were excavating Magnetic Particle (MT) Indications identified by ZPMC's MT Technician as cracks. The ZPMC worker did not have the approved Critical Weld Repair (CWR) B-1050 and B-1051 on hand during the repair.
- ZPMC Quality Control (QC) Certified Weld Inspector (CWI) was not present.
- ZPMC personnel were performing crack removal by grinding without preheat per these approved CWRs.
- Members are identified as LD3008-001 and LD3010-001.
- CWRs identified as B-CWR1051 for LD3008-001 and B-CWR1050 for LD3010-001 specify that QC CWI shall be present with the approved CWR in hand and preheat to 650 C prior to excavation by grinding.
- The following areas were being excavated:
 - LD3008-001; Weld 21; Y=75mm, Weld 14; Y=2300mm, Weld 08; Y=1100mm, Weld 07; Y=400mm, and Weld 06; Y=500mm.
 - LD3010-001; Weld 49; Y=300mm, and Weld 43; Y=0mm.
- These welds are all fillet weld T-joints joining longitudinal diaphragm stiffeners to longitudinal diaphragm web plates.
- The longitudinal diaphragms are located in the Sub-Assembly Bay 3.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

Critical Weld Repair(s) B-CWR1050 and B-CWR1051; (1) “QC and a Lead CWI shall be present, direct and supervise all grinding and welding operations during this repair...” (2) “QC and Lead CWI shall have an approved copy of the CWR in hand prior to the repair.” (4) “...Preheat to a minimum 65degrees C before

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

removing cracks by grinding,...”

Who discovered the problem: Stefan Holmes

Name of individual from Contractor notified: Feng Yun Long

Time and method of notification: 0830 hours, 01/18/10, Verbal

Name of Caltrans Engineer notified: Bill Howe, Ching Chao

Time and method of notification: 0800 hours, 01/19/10, Email

QC Inspector's Name: Guo Yuan Ting

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

Comments:

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

Inspected By: Tsang, Eric

SMR

Reviewed By: Wahbeh, Mazen

SMR

NCR PROPOSED RESOLUTION

To: CALTRANS - SAS Superstructure
333 Burma Road
Oakland CA 94607

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000603

Subject: NCR No. ZPMC-0612

Dated: 21-Jun-2010

Contract No.: 04-0120F4
04-SF-80-13.2 / 13.9

Job Name: SAS Superstructure

Document No.: ABF-NPR-000672 Rev: 02

Contractor's Proposed Resolution:

Reference Resolution: ZPMC QA has written an internal NCR to document this issue and make sure all relevant departments are aware of the problem.

ZPMC QA has written an internal NCR to document this issue and make sure all relevant departments are aware of the problem. As this is a recent recurring issue, ABFJV is having discussions with the ZPMC QA Manager to determine how to reduce the number of these missed indications. Based on these actions, and previously submitted NDT documents, ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000672R02

Caltrans' comments:

Status: REJ

Date: 23-Jun-2010

This NPR provides a general response and goes on to state that ABF will discuss with ZPMC how to reduce "the number of these missed indications". However, NCR ZPMC-0612 is not regarding missed indications. This NCR is regarding the performance of a third time repair without Engineer's approval or an approved CWR. The NPR needs to address the correct issue and should not just indicate that ABF and ZPMC will meet to discuss the issue, but also indicate what course of action was determined from these discussions.

Submitted by: Eagen, Sean

Attachment(s):

Date: 23-Jun-2010

NCR PROPOSED RESOLUTION

To: CALTRANS - SAS Superstructure
333 Burma Road
Oakland CA 94607

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000603

Subject: NCR No. ZPMC-0612

Dated: 25-Aug-2010

Contract No.: 04-0120F4
04-SF-80-13.2 / 13.9

Job Name: SAS Superstructure

Document No.: ABF-NPR-000672 Rev: 03

Contractor's Proposed Resolution:

Reference Resolution: ZPMC QA has issued an internal NCR to the ZPMC QC Department to highlight this issue and ABFJV inspectors will monitor future compliance of this in the workshops.

The referenced CWRs were approved by the Department prior to the repair but ZPMC acknowledges that they were not on hand at the time of the repair. ZPMC QA has issued an internal NCR to the ZPMC QC Department to highlight this issue and ABFJV inspectors will monitor future compliance of this in the workshops. Based on these actions and previously acceptable NDT results for the repairs submitted with ABF-NPR-000672R1, ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000672R03

Caltrans' comments:

Status: CLO

Date: 31-Aug-2010

The proposed resolution is acceptable. This NCR is considered closed.

Submitted by: Woo, Laraine

Date: 31-Aug-2010

Attachment(s):

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: xx.25A

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

Location: Changxing Island, Shanghai, P.R. China**Report No:** NCS-000747**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 01-Sep-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0612**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component:
Procedural	Procedural	Descriptor:	

Date the Non-Conformance Report was written: 18-Jan-2010**Description of Non-Conformance:**

During random in process observations of the fabrication of the longitudinal diaphragms in subassembly, this Quality Assurance (QA) Inspector observed the following issues:

-ZPMC personnel were excavating Magnetic Particle (MT) Indications identified by ZPMC's MT Technician as cracks. The ZPMC worker did not have the approved Critical Weld Repair (CWR) B-1050 and B-1051 on hand during the repair.

-ZPMC Quality Control (QC) Certified Weld Inspector (CWI) was not present.

-ZPMC personnel were performing crack removal by grinding without preheat per these approved CWRs.

-Members are identified as LD3008-001 and LD3010-001.

-CWRs identified as B-CWR1051 for LD3008-001 and B-CWR1050 for LD3010-001 specify that QC CWI shall be present with the approved CWR in hand and preheat to 650 C prior to excavation by grinding.

-The following areas were being excavated:

-LD3008-001; Weld 21; Y=75mm, Weld 14; Y=2300mm, Weld 08; Y=1100mm, Weld 07; Y=400mm, and Weld 06; Y=500mm.

-LD3010-001; Weld 49; Y=300mm, and Weld 43; Y=0mm.

-These welds are all fillet weld T-joints joining longitudinal diaphragm stiffeners to longitudinal diaphragm web plates.

-The longitudinal diaphragms are located in the Sub-Assembly Bay 3.

Contractor's proposal to correct the problem:

Contractor proposes to place ABF QC in charge of bays to ensure conformance with Contact requirements prior to beginning repairs.

Corrective action taken:

An internal NCR was issued in regards to this matter and ABF has agreed to place their own in house QC in charge of monitoring repair activities.

Did corrective action require Engineer's approval?

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Yes No

If so, name of Engineer providing approval:

Date:

Is Engineer's approval attached? Yes No

Comments:

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Jim Simonis, who represents the Office of Structural Materials for your project.

Inspected By: Simonis,Jim

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer